Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

| In the Matter of |) | |
|------------------------------------|---|----------------------|
| |) | |
| Revision of the Commission's Rules |) | CC Docket No. 94-102 |
| to Ensure Compatibility with |) | |
| Enhanced 911 Emergency |) | |
| Calling Systems |) | |

AMERICAN SAMOA TELECOMMUNICATIONS AUTHORITY REQUEST FOR WAIVER OF THE E911 PHASE II RULES

The American Samoa Telecommunications Authority ("ASTCA"), by its attorneys, hereby requests a waiver of the Phase II enhanced 911 ("E911") requirements set forth in section 20.18(g)(1) of the Commission's rules. 1/ This request is being filed pursuant to the Commission's October 12, 2001 Public Notice and the Wireless Telecommunications Bureau's October 19, 2001 Public Notice ("Public Notice"). 2/ As explicitly contemplated by the Public Notice, ASTCA combines this waiver request with up-to-date Phase II implementation information required by section 20.18(i). 3/ Specifically, ASTCA seeks relief from complying

½/ 47 C.F.R. § 20.18(g)(1).

²/ Commission Establishes Schedule for E-911 Phase II Requests by Small and Mid-Sized Wireless Carriers, Public Notice, CC Docket No. 94-102, FCC 01-302 (rel. Oct. 12, 2001); Wireless Telecommunications Bureau Provides Guidance on Filings by Small and Mid-Sized Carriers Seeking Relief from Wireless Phase II Automatic Location Identification Rules, Public Notice, CC Docket No. 94-102, DA 01-2459 (rel. Oct. 19, 2001). The waiver request is also filed pursuant to 47 C.F.R. § 1.3.

³/
47 C.F.R. § 20.18(i). See also Wireless Telecommunications Bureau Provides Guidance on Carrier Reports on Implementation of Wireless E911 Phase II Automatic Location Identification, Public Notice, CC Docket No. 94-102, DA 00-2099 (rel. Sept. 14, 2000) ("Carrier Report Notice").

with the handset activation benchmarks in section 20.18(g)(i). This is the same relief requested by American Samoa License, Inc. ("ASLI"), the only other wireless carrier in American Samoa. 4/ If this relief is not available, ASTCA in the alternative requests a two-year extension of the benchmark dates in section 20.18(g)(i).

I. CARRIER BACKGROUND AND IDENTIFYING INFORMATION

ASTCA holds a cellular license for American Samoa, an unincorporated territory of the United States, located more than 4,100 miles southwest of San Francisco and about 2,300 miles southwest of Hawaii. The small island-based territory has a population of about 60,000 people. Per capita income is \$3,309 per year, and median household income is approximately \$16,114 per year. ASTCA faces competition from ASLI, a privately owned PCS licensee. Until recently, ASTCA offered only analog service. In September 2001, ASTCA commenced digital operations employing Code Division Multiple Access ("CDMA") technology. For E911 purposes, ASTCA has selected a handset-based solution.

As specified in the Bureau's Carrier Report Notice, ASTCA provides the following carrier identifying information:

Name: American Samoa Telecommunications Authority

TRS No.: 812534

^{4/} See American Samoa License, Inc., Request for Waiver of the E911 Phase II Rules, CC Docket 94-102 (July 30, 2001) ("ASLI Petition").

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II. DESPITE ITS BEST EFFORTS, ASTCA CANNOT IMPLEMENT PHASE II ON ITS OWN

As a government-owned service provider, ASTCA takes its public interest obligations very seriously. ASTCA would like to have the ability to provide the residents of American Samoa with advanced services such as E911 with automatic location information ("ALI") capabilities. As described below, however, ASTCA's ability to offer such capability is dependent upon the local public safety answering point ("PSAP"), network equipment vendors and handset manufacturers, none of which appear to be near the point of making Phase II capabilities a reality in American Samoa.

A. The Local PSAP Has Not Yet Implemented E911 Phase I, and Is Not Likely to Implement Phase II in the Foreseeable Future

The Department of Public Safety ("DPS") is the designated PSAP for American Samoa and is responsible for the planning and implementation of E911. ASTCA has not received a request for Phase I E-911 from the DPS. Currently, when 911 is dialed, the call is converted to the 7-digit phone number for the DPS, where it is answered by a dispatcher. At this point in time, the dispatcher is able to identify the caller's mobile number only. Cell site information from ASTCA will be readily available when the DPS is able to implement Phase I by acquiring the interface equipment with the capability to receive and utilize this information. 5/

Due to lack of funding, the DPS is not expected to implement Phase I or Phase II in the foreseeable future. In a March 8, 2001 letter, former DPS Commission Te'o Fuavai stated that "Plans have not been made to go beyond our current landline network because sources of funding have not yet been identified. When funds become available, I'm not sure that ASLI or ASTCA will be asked to implement these [E911] advancements." 6/ The Commissioner estimated that modernization of the DPS's "very old" 911 system for E911 capabilities would require more than \$250,000 and that "it is not clear at this time where the funds

⁵/ The Commission's Phase I E-911 mandate requires carriers to provide to the designated PSAP both the telephone number of the 911 callers and the location of the cell site or base station receiving the 911 call from any mobile handset accessing the carrier's system.

^{6/} See Letter from Te'o Fuavai, DPS Commissioner, to Larry Gattis, Vice President, ASLI (Mar. 8, 2001), attached as Exhibit A. This letter was previously filed in the record as Attachment III of the ASLI Petition.

will be coming from." 7/ Although a new Commissioner of DPS has been appointed,
ASLI reports that it has not received additional information in response to its
queries relating to DPS's E911 plans. 8/

In its waiver petition, ASLI estimates that there will be no valid Phase II request from the DPS for at least three years, based on the time needed to apply for and receive funding, and to integrate new capabilities into the DPS's system. 9/ ASTCA has no information that would contradict ASLI's assessment that prospects for wireless E911 in American Samoa in the foreseeable future "appear dim." 10/ Given this situation, it makes little sense to force American Samoan consumers — who earn far less than their U.S. mainland counterparts — to purchase ALI-capable handsets that they likely will never be able use for E911 purposes before the handsets become obsolete.

B. Network Equipment Upgrades Are Unavailable

After evaluating multiple technologies, and assessing available information from various manufacturers regarding pricing and delivery, ASTCA determined that the best solution for its Phase II compliance would be ALI-capable handsets relying on Assisted-GPS ("A-GPS") technology. The deployment of A-GPS handsets

<u>7</u>/ *Id*.

See ASLI Petition at 9 (stating that it has been unable to learn any new information "despite numerous attempts" contacting the Commissioner's staff).

^{9/} See ASLI Petition at 9.

 $[\]frac{10}{l}$ Id.

requires the installation of additional network hardware and software. The A-GPS handsets operate by collecting data from various sources to calculate location with precision. The measurements are then transmitted through the CDMA network to a Position Determining Equipment (PDE). The PDE calculates location and provides information to the Mobile Positioning Center (MPC). The MPC acts as an interface with the public switched telephone network (PSTN) and the PSAP.

ASTCA's Phase II compliance plan is dependent upon the manufacture and sale of additional hardware and software for the Mobile Switching Center (MSC) and RF network infrastructure, and the addition of a PDE and MPC platforms. The additional hardware and software for the switching network infrastructure includes the purchase of a Home Location Register (HLR) and Visitor Location Register (VLR), IS-41 converter, and software from Motorola.

Like other small carriers, <u>11</u>/ASTCA has not been able to obtain availability dates from its switch vendor, Motorola, for the hardware and software needed for Phase II compliance. ASTCA's ability to obtain information is even more tenuous than most carriers, as it has been assigned Motorola representatives from India, Singapore and currently, Australia, who are less familiar with regulatory

^{11/} See, e.g., Alpine PCS, Inc. and RFB Cellular, Inc., Amendment of Phase II Implementation Report and Request for Limited Waiver (Nov. 29, 2001) at 4 ("Alpine/RFB Petition") ("Alpine and RFB have had significant problems in obtaining definitive capability, availability, and pricing information from its infrastructure and handset vendors. Based on the record such problems are not unusual for small carriers who do not have the purchasing clout of the large carriers. As a result Alpine and RFB are dependent on the record put forth to the Commission by the large CDMA carries who have been able to extract information from vendors.")

requirements specific to the United States. ASTCA notes that Verizon Wireless, in its waiver request, estimates that Motorola's software will not be available until November of 2002. 12/ As many other smaller carriers have noted, equipment upgrades often take nine months or more after becoming "generally available" for the large carriers before they reach the smaller carriers. 13/ Being a very small customer located some 4,000 miles off the mainland U.S., ASTCA is very likely to face such a long delay, if not longer. If this time estimate holds, ASTCA would not be able to obtain installation of the upgrades until third quarter 2003, meaning that testing and final implementation could not be accomplished until first quarter 2004, at the earliest.

C. ALI-Capable Handsets Are Not Available to Small Carriers

Similar to the situation with network upgrades, ASTCA and other smaller carriers do not know when they will be able to obtain ALI-capable handsets.

ASTCA currently is attempting to obtain information on pricing, delivery, and support for the Samsung SPH-N300, which is marketed by Sprint PCS as America's first GPS-enabled wireless phone. However, both Leap Wireless and Alltel – much

 $[\]underline{^{12}}$ See Verizon Wireless, Updated Phase II E911 Report and Request for Limited Waiver (July 25, 2001) at 15, 24.

^{13/} See e.g., ASLI Petition at 10 ("Based on ASLI's experience . . . there is a nine month lag time between the date that a vendor declares its product 'Generally Available' and the date that it arrives on the shores of American Samoa."); Alpine/RFB Petition at 4 ("smaller carriers . . . face a much greater delay (i.e., 9 months to a year) than larger carriers because manufacturers of handsets and switch upgrades afford priority to their larger customers"); Inland Cellular Telephone Co., Petition for Limited Waiver of Sections 20.18(e) and (g), CC Docket 94-102 (July 30, 2001) at 7 (estimating that it will take nine months for software upgrades to "trickle down" to smaller carriers).

larger carriers than ASTCA – report that they are unable to obtain the Samsung handsets because of an apparent exclusive arrangement between Samsung and a "major carrier," and/or because of a substantial minimum order requirement. 14/ Moreover, Devon Mobile Communications L.P. reports that it was also denied access to Samsung handsets, and that Nokia and Kyocera handsets would not be available to it until fourth quarter 2002 and third quarter 2002, respectively. 15/ Again, as a small, remote carrier, ASTCA cannot realistically expect to obtain access to the latest technology handsets in advance of larger carriers serving mainland U.S. markets.

III. ASTCA REQUESTS A FULL OR, IN THE ALTERNATIVE, PARTIAL WAIVER OF HANDSET ACTIVATION BENCHMARKS

As described above, American Samoa presents unique circumstances that make a waiver particularly appropriate. The small population base combined with lower economic levels makes it difficult for the local PSAP to support an upgrade of its system, even to Phase I E911. The geographic remoteness and small size of the market ensures that the territory will be among the last to obtain access to the latest technology. Lower wage levels mean that consumers may not be willing or

^{14/} See Leap Wireless International, Petition for Partial Waiver of E-911 Phase II Implementation Milestones, CC Docket 94-102 (Aug. 23, 2001) at 15; Alltel Communications, Inc., Petition for Waiver of Sections 20.18(e) and (g) of the Commission's Rules, CC Docket 94-102 (July 25, 2001) at Appendix D.

See Devon Mobile Communications L.P., Petition for a Limited Partial Waiver of the E911 Location Technology Implementation Rules, CC Docket 94-102 (Nov. 28, 2001) at 8.

able to afford new, advanced ALI-capable handsets. 16/ For these reasons, ASTCA's competitor, ASLI has sought a waiver of section 20.18(g)(1) that is limited to American Samoa. 17/ ASTCA supports ASLI's waiver request and, for virtually identical reasons, seeks an identical waiver. Because ASTCA and ASLI operate in the same market under similar conditions, the grant of only one party's waiver request would create a competitive disadvantage to the other party. The party required to meet the activation benchmarks would eventually be forced to turn away prospective subscribers who wished to activate pre-existing or less expensive non-ALI-capable handsets, thereby pushing them into the hands of the other carrier.

If, despite the evidence presented by ASTCA and ASLI, the Commission determines that it will not grant the requested waivers, ASTCA requests in the alternative that ASTSCA be permitted a two-year extension of the benchmark compliance dates for the sale and activation of ALI-capable handsets, as set forth below:

- (A) Begin selling and activating location-capable handsets no later than October 1, 2003;
- (B) Ensure that at least 25 percent of all new handsets activated are

Qualcomm, the primary manufacturer of CMDA chips, reportedly will make only limited quantities of its "low end" A-GPS-enabled chip, while focusing the bulk of its production on its more expensive A-GPS chip for use in 3G handsets. *See* Qwest Wireless, LLC and TW Wireless LLC, Petition for Extension of Time or Waiver of Section 20.18 of the Rules, CC Docket 94-102 (July 23, 2001) at 17, note 39.

^{17/} See ASLI Petition at 12 (seeking a waiver "limited to American Samoa").

location-capable no later than December 31, 2003;

- (C) Ensure that at least 50 percent of all new handsets activated are location-capable no later than June 30, 2004;
- (D) Ensure that 100 percent of all new digital handsets activated are location-capable no later than December 31, 2004 and thereafter; and
- (E) By December 31, 2007, achieve 95 percent penetration of location-capable handsets among its subscribers.

ASTCA notes that, based on the waiver request filings to date, most other CDMA carriers predict that they will not be able to meet the 100% benchmark until the end of 2003, and in some cases until second quarter 2004. 18/ Given the particularly challenging compliance environment it faces, ASTCA should be afforded at least as much time as these mainland U.S. CDMA carriers, if not more.

IV. OTHER INFORMATION REQUESTED

In the unlikely event that ASTCA receives a valid request to implement

Phase II E911, ASTCA provides below additional details regarding ASTCA's Phase

II implementation plans, not otherwise stated above, as specified in the Carrier

Report Notice:

A. Testing and Verification Methods

ASTCA will use testing methods for accuracy based upon guidelines set forth in OET Bulletin 71. ASTCA also intends to seek vendor participation in the

See, e.g. Cingular Wireless LLC, Petition for Reconsideration, CC Docket No. 94-102 (Nov. 13, 2001) at Attachment II ("Handset Deployment Schedule," listing dates for 17 CDMA carriers based on their prior FCC filings).

verification testing stages.

B. Implementation of PSAP Interface

ASTCA plans on deploying the functionality of the MPC as defined in TIA/EIA J-STD-036, Enhanced Wireless 911 Phase 2. According to J-STD-036, the MPC provides the point of interface between the ASTCA and the PSAP networks, and serves as the network entity that retrieves, forwards, stores and controls position data within the location network. To accommodate the transmission of the Phase II data from ASTCA, the PSAP (i.e., DPS) will need to purchase a E-911 system capable of receiving and utilizing data such as latitude and longitude coordinates.

VI. **CONCLUSION**

For the foregoing reasons, ASTCA requests that the Commission grant its request for waiver of the Phase II requirements contained in 47 C.F.R. §20.18(g)(1). If the Commission determines that it will not waive these requirements for ASTCA and similarly situated carriers, ASTCA requests in the alternative that the Commission grant a limited waiver by extending each of the benchmark compliance dates in 47 C.F.R. §20.18(g)(1) by two years.

Respectfully submitted,

AMERICAN SAMOA TELECOMMUNICATIONS AUTHORITY

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Counsel for American Samoa Telecommunications Authority

Dated: November 30, 2001

DECLARATION

I, Aleki Sene, hereby declare under penalty of perjury that I am Executive Director of American Samoa Telecommunications Authority, that I am authorized to make this declaration on its behalf, and that the facts stated in the foregoing Request are true and correct to the best of my knowledge, information and belief.

Bv

Aleki Sene

Executive Director

American Samoa Telecommunications

Authority

EXHIBIT A

Letter from Te'o Fuavai, Commissioner of the Department of Public Safety ${\bf March~8,~2001}$



DEPARTMENT OF PUBLIC SAFETY

AMERICAN SAMOA GOVERNMENT

P.O. Box 1086, Pago Pago, American Samoa 96799 Telephone: (684) 633-1111 • Fax No.: (684) 633-7296



Serial: 55-2001

Governa HON, TOGIOLA T.A. TULAFONO Office of the Commissioner

March 8, 2001

Mr. Larry E. Gattis Vice President American Samoa Licenses, Inc. P.O. Box 478 Pago Pago, American Samoa 96799

Dear Mr. Gattis:

Thank you for your letter of inquiry into the Enhanced 911 dated March 6, 2001. I apologize for not having responded to your earlier inquiries.

You know that we currently have a "911" system that is very old as compared the current E911 in the states. The reason is that the equipment to modernize our 911 is expensive and that it would take an excess of \$250,000 to probable take us through Phase I and II that you mentioned.

To answer your questions:

- Yes. The Department of Public Safety is the designated PSA or Public Safety Answering Point for **(1)** American Samoa. We currently use a phone system.
- Yes. DPS, headquartered at the Police Headquarters Building in Fagatogo, is responsible for (2) planning and implementing the E911 Phases I and II for American Samoa.
- Plans have not been made to go beyond our current landline network because sources of funding (3) have not yet been identified. When funds are available, I'm not sure that ASLI or ASTCA will bew asked to implement these advancements.

To answer the rest of your questions, it is not clear at this time where the funds will be coming from. I will be requesting this month two sources for the funds.

I will keep you posted on any future development. I appreciate your interest in advancing our response capabilities to emergencies.

Sincerely yours,

CC:

Fagafaga Daniel Langkilde - General Manayer ASLI